

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the Application.

#### **Listing of Claims:**

1. (currently amended) A method of tuning an application deployed in an application server, comprising a processor operable to execute computer program instructions, a memory operable to store the computer program instructions executable by the processor, and the computer program instructions stored in the memory and executable to perform the steps of:

deploying the application in the application server;

invoking an application tuning server-side component operable to retrieve information relating to parameters of the deployed application that are to be tuned, comprising current values of the parameters of the deployed application that are to be tuned and measurements of performance of the application effected by the current values of the parameters, wherein the information relating to each parameter is accessible by the selection of a tab for each respective parameter and the current values of each of the parameters and controls that allow the current values of the parameter to be modified are displayed in a parameter panel and the measurements of performance affected by the values of the parameters and controls that allow for the values of the parameters to be determined are displayed in a measurement panel;

displaying the information specifically relating to a parameter of the parameters of the deployed application and at least one measurement of performance of the application effected by the current value of the parameter in response to the selection of

an object associated with the parameter from a display, wherein the value of the at least one measurement of performance of the application is displayed in the measurement panel;

receiving specifications of values of application tuning parameters;

tuning the deployed application using the received specified parameter values by modifying the current value of the parameter being used by the deployed application; and

displaying an effect of the modification of the value of the parameter of the deployed application to the at least one measurement of the performance of the application in the display of the information specifically relating to the parameter in real time.

2. (original) The method of claim 1, wherein the step of invoking the application tuning server-side component is performed in response to an action by an administrator, engineer, or user of the application server.

3. (canceled)

4. (currently amended) The method of claim [[3]] 1, wherein the application tuning server-side component is operable to accept input from the administrator, engineer, or user specifying values of the application parameters of the deployed application that are to be tuned.

5. (currently amended) The method of claim 4, wherein the specified values of the application parameters of the deployed application that are to be tuned comprise at least one of:

database connection pool size, thread pool size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, session pool size, and [[Java]] Virtual Machine tuning parameters.

6. (previously presented) The method of claim 5, wherein the measurements of performance of the application comprise at least one of:

overall transactions per second, average request time, HTTP transactions per second, database connections used, HTTP connections used, active thread count, overall throughput, database throughput, HTTP throughput.

7. (currently amended) The method of claim 6, wherein the application tuning server-side component is implemented using [[Java]] JAVA Management Extensions.

8. (currently amended) A system for tuning an application deployed in an application server comprising:

a processor operable to execute computer program instructions;

a memory operable to store the computer program instructions executable by the processor; and

the computer program instructions stored in the memory and executable to perform the steps of:

deploying the application in the application server;

invoking an application tuning server-side component operable to retrieve information relating to parameters of the deployed application that are to be tuned, comprising current values of the parameters of the deployed application that are to be tuned and measurements of performance of the application effected by the current values of the parameters, wherein the information relating to each parameter is accessible by the selection of a tab for each respective parameter and the current values of each of the parameters and controls that allow the current values of the parameter to be modified are displayed in a parameter panel and the measurements of performance affected by the values of the parameters and controls that allow for the values of the parameters to be determined are displayed in a measurement panel;

displaying the information specifically relating to a parameter of the parameters of the deployed application and at least one measurement of performance of the application effected by the current value of the parameter in response to the selection of an object associated with the parameter from a display, ~~wherein the value of the at least one measurement of performance of the application is displayed in the measurement panel;~~

receiving specifications of values of application tuning parameters;

tuning the deployed application using the received specified parameter values by modifying the current value of the parameter being used by the deployed application; and

displaying an effect of the modification of the value of the parameter of the deployed application to the at least one measurement of the performance of the

application in the display of the information specifically relating to the parameter in real time.

9. (original) The system of claim 8, wherein the step of invoking the application tuning server-side component is performed in response to an action by an administrator, engineer, or user of the application server.

10. (canceled)

11. (currently amended) The system of claim [[10]] §, wherein the application tuning server-side component is operable to accept input from the administrator, engineer, or user specifying values of the parameters of the deployed application that are to be tuned.

12. (currently amended) The system of claim 11, wherein the specified values of the parameters of the deployed application that are to be tuned comprise at least one of:

database connection pool size, thread pool size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, session pool size, and [[Java]] JAVA Virtual Machine tuning parameters.

13. (previously presented) The system of claim 12, wherein the measurements of performance of the application comprise at least one of:

overall transactions per second, average request time, HTTP transactions per second, database connections used, HTTP connections used, active thread count, overall

throughput, database throughput, HTTP throughput.

14. (currently amended) The system of claim 13, wherein the application tuning server-side

component is implemented using [[Java]] JAVA Management Extensions.

15. (currently amended) A computer program product for tuning an application deployed in an application server comprising:

- a computer readable storage medium;

- computer program instructions, recorded on the computer readable storage medium, executable by a processor, for performing the steps of:

- deploying the application in the application server;

- invoking an application tuning server-side component operable to retrieve information relating to parameters of the deployed application that are to be tuned, comprising current values of the parameters of the deployed application that are to be tuned and measurements of performance of the application effected by the current values of the parameters, wherein the information relating to each parameter is accessible by the selection of a tab for each respective parameter and the current values of each of the parameters and controls that allow the current values of the parameter to be modified are displayed in a parameter panel and the measurements of performance affected by the values of the parameters and controls that allow for the values of the parameters to be determined are displayed in a measurement panel;

displaying information relating to a specific parameter of the parameters of the deployed application and at least one measurement of performance of the application effected by the current value of the specific parameter in response to the selection of an object associated with the specific parameter from a display, ~~wherein the value of the at least one measurement of performance of the application is displayed in the measurement panel;~~

receiving specifications of values of application tuning parameters;

tuning the deployed application using the received specified parameter values by modifying the current value of the parameter being used by the deployed application; and

displaying an effect of the modification of the value of the specific parameter of the deployed application to the at least one measurement of the performance of the application in the display of the information relating to the parameter in real time.

16. (original) The computer program product of claim 15, wherein the step of invoking the application tuning server-side component is performed in response to an action by an administrator, engineer, or user of the application server.

17. (canceled)

18. (currently amended) The computer program product of claim ~~[[17]]~~ 15, wherein the application tuning server-side component is operable to accept input from the administrator, engineer, or user specifying values of the parameters of the deployed application that are to be tuned.

19. (currently amended) The computer program product of claim 18, wherein the specified values of the application parameters of the deployed application that are to be tuned comprise at least one of:

database connection pool size, thread pool size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, session pool size, and [[Java]] JAVA Virtual Machine tuning parameters.

20. (previously presented) The computer program product of claim 19, wherein the measurements of performance of the application comprise at least one of:

overall transactions per second, average request time, HTTP transactions per second, database connections used, HTTP connections used, active thread count, overall throughput, database throughput, HTTP throughput.

21. (currently amended) The computer program product of claim 20, wherein the application tuning server-side component is implemented using [[Java]] JAVA Management Extensions.

22. (currently amended) An application tuning server-side component operable to tune an application deployed in an application server comprising a processor operable to execute computer program instructions, a memory operable to store the computer program instructions executable by the processor, and wherein the application tuning server-side component is embodied in computer program instructions stored in the



memory and executable to perform the steps of:

retrieving information relating to parameters of the deployed application that are to be tuned, comprising current values of parameters of the deployed application that are to be tuned and measurements of performance of the application effected by the current values of the parameters, wherein the information relating to each parameter is accessible by the selection of a tab for each respective parameter and the current values of each of the parameters and controls that allow the current values of the parameter to be modified are displayed in a parameter panel and the measurements of performance affected by the values of the parameters and controls that allow for the values of the parameters to be determined are displayed in a measurement panel;

displaying information relating to a specific parameter of the parameters of the deployed application and at least one measurement of performance of the application effected by the current value of the specific parameter in response to the selection of an object associated with the specific parameter from a display, ~~wherein the value of the at least one measurement of performance of the application is displayed in the measurement panel;~~

receiving specifications of values of application tuning parameters;  
tuning the deployed application using the received specified parameter values by  
modifying the current value of the parameter being used by the deployed application; and

displaying an effect of the modification of the value of the specific parameter of the deployed application to the at least one measurement of the performance of the application in the display of the information relating to the parameter in real time.

23. (original) The application tuning server-side component of claim 22, wherein the application tuning server-side component is invoked in response to an action by an administrator, engineer, or user of the application server.

24. (canceled)

25. (currently amended) The application tuning server-side component of claim [[24]] 22, wherein the application tuning server-side component is operable to accept input from the administrator, engineer, or user specifying values of the parameters of the deployed application that are to be tuned.

26. (currently amended) The application tuning server-side component of claim 25, wherein the application tuning server-side component is implemented using [[Java]] JAVA Management Extensions.

27. (currently amended) The application tuning server-side component of claim 26, wherein the specified values of the parameters of the deployed application that are to be tuned comprise at least one of:

database connection pool size, thread pool size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, session pool size, and [[Java]] JAVA Virtual Machine tuning parameters.

28. (previously presented) The application tuning server-side component of claim 27,

wherein the measurements of performance of the application comprise at least one of:

overall transactions per second, average request time, HTTP transactions per second, database connections used, HTTP connections used, active thread count, overall throughput, database throughput, HTTP throughput.